



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/715,681	11/17/2000	Yoav Raz	EMS-00202	4765
26339	7590	04/21/2005	EXAMINER	
			DADA, BEEMNET W	
PATENT GROUP		ART UNIT		PAPER NUMBER
CHOATE, HALL & STEWART				2135
EXCHANGE PLACE, 53 STATE STREET				
BOSTON, MA 02109				

DATE MAILED: 04/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/715,681	RAZ ET AL.	
	Examiner	Art Unit	
	Beemnet W Dada	2135	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 28 February 2005.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-7,22-28 and 41-52 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-7,22-28 and 41-52 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____.
_____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The request filed 2 February 2005 for a request for Continued Examination (RCE) under 37 CFR 1.114 based on parent Application 09/715681 is acceptable and an RCE has been established. An Action on the RCE follows. Claims 1, 22 and 41 have been amended. Claims 1-7, 22-28 and 41-52 are pending.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-7, 22-28 and 41-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Waldin et al US Patent 6,094,731 (hereinafter referred to as Waldin) in view of Stang (See Ref U).

4. As per claim 1, Waldin teaches a method of scanning a storage device for viruses, comprising:

determining physical portions of the storage device that have been modified since a previous virus scan using information about the physical portions that is independent of the file structure, file system, and file types (note that determination of modification of file sectors is performed according to matching pre-stored hash values for a sector) [column 2, lines 57-64 column 6, lines 37-47, column 7, line 64 – column 8, line 8 and column 3, lines 40-45]; and

Art Unit: 2135

scanning at least parts of the physical portions for viruses, wherein scanning is independent of the file structure, file system and file types (scanning for viruses is performed regardless of the file format, but according to matching pre-stored hash values for a sector which is independent of location, format or name of the file) [column 6, lines 43-46 ,column 7, lines 37-46, column 7, line 64 – column 8, line 8 and column 3, lines 40-45].

Waldin does not explicitly teach performing scanning without using information about a file structure, a file system or a file type. However Stang teaches a method of scanning a storage device for viruses including performing scanning without using information about a file structure, a file system or a file type [see Stang, page 15, section checkup]. Both Waldin and Stang teach a method for scanning of storage devices for viruses. It would have been obvious to one having ordinary skill in the art at the time of applicant's invention to employ the teaching of Stang within the system of Waldin, in order to simplify scanning and scan everything on the storage device.

5. As per claim 41, Waldin teaches an anti-virus unit comprising:

means for coupling to at least one storage device [column 3, lines 47-55];
means for determining physical portions of the storage device that have been modified since a previous virus scan that is independent of the file structure, file system, and file types (note that determination of modification of file sectors is performed according to matching pre-stored hash values for a sector) [column 2, lines 57-64 column 6, lines 37-47, column 7, line 64 – column 8, line 8 and column 3, lines 40-45]; and

means for scanning at least parts of the physical portions for viruses wherein scanning is independent of the file structure, file system and file types (scanning for viruses is performed regardless of the file format, but according to matching pre-stored hash values for a sector

Art Unit: 2135

which is independent of location, format or name of the file) [column 6, lines 43-46 ,column 7, lines 37-46, column 7, line 64 – column 8, line 8 and column 3, lines 40-45].

Waldin does not explicitly teach performing scanning without using information about a file structure, a file system or a file type. However Stang teaches a method of scanning a storage device for viruses including performing scanning without using information about a file structure, a file system or a file type [see Stang, page 15, section checkup]. Both Waldin and Stang teach a method for scanning of storage devices for viruses. It would have been obvious to one having ordinary skill in the art at the time of applicant's invention to employ the teaching of Stang within the system of Waldin, in order to simplify scanning and scan everything on the storage device.

6. As per claims 2 and 42, the combination of Waldin and Stang teaches the method as applied above. Furthermore, Waldin teaches the method, wherein the physical portions correspond to tracks (sectors) of the storage device [column 4, lines 4-8 and figure 1].

7. As per claims 3 and 43, the combination of Waldin and Stang teaches teaches the method as applied above. Furthermore, Waldin teaches the method, wherein the physical portions correspond to sectors of the storage device [column 4, lines 4-8 and figure 1].

8. As per claims 4 and 44, the combination of Waldin and Stang teaches the method as applied above. Furthermore, Waldin teaches the method, wherein the physical portions correspond to sub-portions of the storage device [column 4, lines 4-8 and figure 1].

9. As per claims 46, 51 and 52 the combination of Waldin and Stang teaches the method as applied above. Furthermore, Waldin teaches the method, wherein said means for coupling includes means for coupling to only one storage device [column 3, lines 47-55].

10. As per claims 47-50, the combination of Waldin and Stang teaches the method as applied above. Furthermore, Waldin teaches the method, wherein said means for coupling includes means for coupling to more than one storage device [column 8, lines 20-30].

11. As per claims 22-25, the claimed steps correspond to the functions of the elements of the method claims 1-4, which has been rejected above and thus rejected with the same reason applied thereto.

12. As per claims 5 and 45, the combination of Waldin and Stang teaches the method as applied above. Furthermore, Waldin teaches creating a table that is indexed according to each of the portions [fig 1, unit 10 and column 4, lines 4-8]. Waldin also teaches scanning for viruses when it has been determined that portions have been modified [column 4, lines 9-12], and calculating a new hash value upon determination of a modification [column 4, lines 58-60]. However Waldin does not explicitly teach setting a specific one of entries subject to a write operation. It would have been obvious to one having ordinary skill in the art at the time the invention was made to include a method of setting a specific one of entries subject to a write operation. This would have been obvious because Waldin teaches placing identification numbers into sectors that is scanned, every time a sector is read [column 4, lines 52-58]. Based on this teachings it would have been obvious to one having ordinary skill in the art at the time

Art Unit: 2135

the invention was made to include a method of setting a specific one of entries subject to a write operation into the indexed sector table taught by Waldin.

13. As per claims 6 and 7, the combination of Waldin and Stang teaches the method as applied to claim 5 above. Furthermore Waldin teaches method, wherein creating the table includes copying another table provided by the storage device [column 3, lines 50-55, figure 1, originating and recipient computers].

14. As per claims 26-28, the claimed steps correspond to the functions of the elements of the method claims 5-7, which has been rejected above and thus rejected with the same reason applied thereto.

Response to Arguments

Applicant's arguments with respect to claims 1, 22 and 41 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Beemnet W Dada whose telephone number is (571) 272-3847. The examiner can normally be reached on Monday - Friday (9:00 am - 5:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Y Vu can be reached on (571) 272-3859. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Beemnet Dada

April 10, 2005

Art Unit: 2135

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Beemnet Dada

April 10, 2005



KIM VU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 210C